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REMARKS

The courtesy of the Examiner in withdrawing the rejection of claims 1-10 and conducting another diligent search is acknowledged with appreciation.

Patent Owner received a request from the U.S. Patent and Trademark Office regarding art pertinent to this application without identifying the application. This e-mail message was apparently sent to many others, and patent owner respectfully requests identification of all addressees of this e-mail message and copies of all responses to it.

2,3. Claims 2,3 and 7-10 stand rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an audio speaker system according to claim 1 wherein the speaker is disposed in the rearward section of the trunk is said to not reasonably provide enablement for the speaker occupying negligible useful trunk volume to cause a smaller decrease in calculated trunk volume than would occur with said one speaker mounted in the rear deck. It is said the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected to make the invention commensurate in scope with these claims. Specifically, the inventions of Claims 2 and 7 are said to require a low frequency speaker of sufficiently small size and regular shape to occupy negligible space by fitting into a rear trunk corner as depicted in applicant's FIGS. 1, 2, and 6. This is said to require a low frequency speaker the approximate size and shape of a standard brick. At the time of the invention, low frequency speakers of this size and shape were not known to those of ordinary skill in the art. Evidence of this is found in Ziffer (March). In the paragraph spanning the third and fourth columns of page 48, a professional car audio installer is quoted indicating that the Bazooka bass tubes were the most compact bass speakers available at the time of the invention. In the appeal brief filed on 30 October 2003, applicant states: "it is impossible to put these large Bazooka bass speakers in the rear trunk corner at the rear of the vehicle". As such, applicant is said to admit that the most compact bass speaker known to one of ordinary skill in the art at the time of the invention could not be employed as claimed. Applicant's disclosure is said to provide no information on how to produce a low frequency speaker of the size and shape necessary to be employed as claimed. Claims 3 and 8 through 10 depend from claims 2 or 7. As

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volume is inherent in the rear corner mounting.

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such, it is said the claims are not enabled. In addition, it is said claims 3 and 8 require rear corner mounting and so claim a compactness of the speaker beyond what is required by claims 2 and 7. Therefore the failure of enablement is greater for these claims. In order to advance prosecution to the maximum possible extent, Examiner is said to present prior art rejections for claims 2 and 7 and claims depending therefrom based on the interpretation that either (1) the invention comprehends a vehicle with sufficient space between the interior trunk trim and the vehicle outer shell to contain a bass speaker or (2) applicant's disclosure admits that the

occupying of negligible useful trunk volume and the smaller decrease in calculated useful truck

This ground of rejection is respectfully traversed. The parent of this application was filed on April 21, 1992, and in numerous office actions and two appeals, including two Examiner's answers, the sufficiency of the disclosure was never challenged. The application discloses an exemplary embodiment, and FIGS. 3 and 4 disclose actual frequency responses of the exemplary embodiment. An embodiment of the invention takes advantage of locating a speaker in the rear corner of the trunk to provide good low frequency response with a speaker that occupies negligible useful trunk volume. Accordingly, withdrawal of the rejection of claims 2, 3 and 7-10 as lacking enablement is respectfully requested.

4. Claims 5 and 10 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The claims are said to contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 5 and 10 claim the vehicle is "constructed and arranged to be free of an undesirable peak in the rear front seat frequency response ... 80-100K HZ and ... an undesirable hole between 60-80HZ in the front seat frequency response". However, the specification does not provide guidance on how to construct such a vehicle. Audio speaker system and vehicles are said to be different. It is said the a one skilled in the audio speaker system art would not be skilled in vehicle construction, and as such, one skilled in the audio speaker system art would not, at the time of the invention, be enabled to construct a vehicle as claimed. In order to advance prosecution to the maximum Applicant: Donald F. Hamilton et al.

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possible extent, the Examiner is said to present prior art rejections for Claims 2 and 7 and claims depending therefrom based on the interpretation that freedom from the undesirable frequency hole and peak claimed is inherent in a trunk mounted bass speaker when there are no holes in the rear deck.

This ground of rejection is respectfully traversed. Claims 5 and 10 claim an audio speaker system wherein the vehicle is characterized by a front seat frequency response and a rear seat frequency response constructed and arranged to be free of an undesirable peak in the rear seat frequency response of the vehicle between 80-100HZ and free of an undesirable hole between 60-80HZ in the front seat frequency response of the vehicle. The specification discloses that this claimed structure is achieved with the low frequency speaker disposed within the trunk of the vehicle at the trunk rear and the rear deck free of speaker holes.

Accordingly, withdrawal of the rejection of claims 5 and 10 as failing to comply with the enablement requirement is respectfully requested.

5-10. Claims 2, 3 and 7-10 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2 and 7 are said to recite the limitation "said one speaker mounted in said rear deck". There is said to be insufficient antecedent basis for this limitation in the claim. Claim 1, from which claim 2 depends and the antecedent portion of claim 2 recite the limitation "at least one speaker", which encompasses one or a plurality of speakers. As such, it is said to be unclear whether "said one speaker" refers to all speakers in a plurality, one speaker in a plurality or a single speaker that is not part of a plurality. For the purpose of this office action, the Examiner assumes the recitation "said one speaker" is intended as "said at least one speaker".

This ground of rejection is respectfully traversed and not understood. Claims 2 and 7 add the limitations, "wherein said at least one speaker is disposed in a rearward section of the trunk occupying negligible useful truck volume to cause a smaller decrease in calculated trunk volume than would occur with said one speaker mounted in said rear deck."

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The specification fully explains this limitation in the two paragraphs on page two, beginning at line 7:

With reference now to the drawings and more particularly FIG. 1, a speaker enclosure 9 is placed in a rearward section of the trunk 7 of the vehicle 1. The speaker enclosure 9 is not, however, mounted to the rear deck 3 nor are speaker holes provided in the rear deck. As shown in the rear view of FIG. 2, placement of the speaker enclosure 9 is preferably in a corner of the vehicle trunk 7 (here the left corner).

The speaker configuration of the invention has numerous advantages over the prior art. Since the invention does not require holes to be cut in the rear deck, transmission of road noise into the passenger compartment is reduced. The package shelf does not, however, affect low frequencies (+/- 1dB), and the trunk as a whole acts as a natural low-pass filter. Also, because of the way auto manufacturers calculate trunk volume, the enclosure in the corner of the trunk results in a smaller decrease in calculated trunk volume then do speakers mounted in the rear deck.

It is said that applicant claims the invention as a speaker system and the limitations of the claimed invention can not be made clear by reference to a vehicle of uncertain configuration. The passage quoted above makes it clear that instead of having the bass speaker that is typically depending from the rear deck and extending into useful trunk volume, the bass speaker is located in the rear of the trunk and occupies negligible useful trunk volume.

Accordingly, withdrawal of the rejection of claims 2, 3 and 7-10 as indefinite for failing to particularly point out distinctly claim subject matter which applicant regards as the invention is respectfully requested.

11-16. Claims 1-4 stand rejected under 35 U.S.C. §102 (a) as being anticipated by Ziffer (May). This ground of rejection is respectfully traversed. We rely on the authorities set forth on pages 4 and 5 of our brief that was filed on October 30, 2003. Claims 1 and 2 call for the at least one low frequency speaker disposed within the trunk of the vehicle at the trunk rear in a location spaced from the passenger compartment by the portion of the trunk extending to the front of the vehicle such that the at least one speaker is clear of the rear deck above the trunk floor and outside the spare tire compartment, claim 2 adding that the at least one speaker is disposed in a rearward section of the trunk occupying negligible useful trunk volume to cause a smaller

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decrease in calculated trunk volume that would occur with said one speaker mounted in said rear deck. The reference states:

Since the trunk is usually the main repository for audio components, some installations leave little room for luggage, much less a spare tire. Baker managed to keep his spare-and enough room for luggage-by constructing a false floor in which he mounted components. He also retained use of the fold down rear seat by not mounting hardware on the rear wall of the trunk. He gave up only one foot on each side and on the bottom of the trunk.

A subwoofer box has been positioned in each of the trunk's side walls. To maximize the volume of the enclosures (one cubic foot on the left side, slightly more on the other), their fiberglass back walls were built to conform to the shape of the car. Car Audio and Electronic May 1991, P.40.

The picture on that page clearly shows these speakers located in the side of the trunk between the rear of the trunk and the front, and giving up "one foot one each side" and on the bottom of the trunk with said woofer boxes occupying one cubic foot on the left side and slightly more on the other hardly discloses a speaker disposed in a rearward section of the trunk occupying negligible useful trunk volume to cause a smaller decrease in calculated trunk volume than would occur with said one speaker mounted in said rear deck,

Accordingly, withdrawal of the rejection of claims 1-4 as anticipated by the reference is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the reference regarded as corresponding to each limitation in each of these rejected claims.

17-21. Claims 1 and 4-6 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ziffer (March) (Car Audio and Electronics, March 1991). These rejections are said to rely on the embodiment depicted in the bottom photograph of page 48 of the reference said to show the bass tubes placed some distance rearward of the trunk front wall. The reference is said to disclose bass tubes for a Volvo 740 Turbo. As said to be visible in the photograph the vehicle disclosed has a passenger compartment, a spare tire compartment, a trunk with a trunk floor, a trunk front wall and a rear shelf, the bass tubes are said to be clear of the rear deck above the trunk floor and outside the spare tire compartment. Regarding claim 5, and claim 6, the reference is said to not

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use deck-mounted speakers or have rear deck speaker holes and is said to be inherently characterized by freedom from the undesirable front seat frequency response hole and rear seat frequency response peak. These grounds of rejection are respectfully traversed.

This reference is no more pertinent than the reference we distinguished in point I of the brief filed October 30, 2003. The present reference also discloses Bazooka bass tubes and shows the large BAZOOKA tubes extending from front to rear in the trunk. Claims 4-6 are dependant upon and include this limitation, and nothing in the reference remotely discloses that the vehicle is characterized by a front seat frequency response and rear seat frequency response constructed and arranged to be free of an undesirable peak in the rear seat frequency response of the vehicle between 80-100HZ and free of an undesirable hole between 60-80HZ in the front seat frequency response of the vehicle. Accordingly, withdrawal of the rejection of claims 1 and 4-6 as anticipated by this reference is respectfully requested. If this ground of rejection is repeated the Examiner is respectfully requested to quote verbatim the language in the reference regarded as corresponding to each element in these rejected claims.

22-26. Claims 2-4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ziffer (May) as a primary reference in view of Bazooka as a secondary reference. Regarding claim 2, the primary reference is said to anticipate all elements of claim 1 and to anticipate all elements of claim 2 except the at least one speaker being disposed in a rearward section of the trunk occupying negligible useful trunk volume to cause a smaller decrease in calculated trunk volume than would occur with that speaker mounted in the rear deck. The secondary reference is said to discloses a woofer configuration (third example) for use in the vehicle similar to the one disclosed in the primary reference in which the woofers are disposed adjacent to and parallel to the sides of the trunk and "directed to the rearmost corner of the trunk". It is said to be clear from the first and second example of the secondary reference that the woofer is intended to be disposed 3-4 inches from the wall the woofer is facing said to be the rear of the trunk. As such, the reference is said to disclose the woofer disposed in a rearward section of the trunk. The disposition adjacent and parallel to the side of the trunk and 3-4 inches to the rear of the trunk is said to place the woofer in a rear trunk corner of the vehicle. It is said it would have been

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obvious to one skilled in the art at the time of the invention to apply the woofer configuration said to be taught by the secondary reference to the vehicle sound system said to be taught by the primary reference for the purpose of reducing installation time, effort and cost of utilizing a ready-made subwoofer instead of fabricating one from raw materials. Because applicant states placement of the speaker enclosure is preferably in a corner of the vehicle trunk occupying negligible useful trunk volume because of the way auto manufacturers calculate useful trunk volume, the enclosure in the corner of the trunk results in a smaller decrease in calculated useful trunk volume than do speakers mounted in the rear deck, applicant is said to admit that the occupying of negligible useful trunk volume and the smaller decreases in calculated useful trunk volume is inherent in the rear corner mounting said to result from the combination of primary and secondary references to make obvious all elements of claim 2. Regarding claim 3, the combination of primary and secondary references is said to make obvious the speaker located in the a rear trunk corner at the rear of the vehicle. Regarding claim 4, the secondary reference is said to further disclose the woofers mounted in enclosures.

This ground of rejection is respectfully traversed.

As the Federal Circuit Court of Appeals said in In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999):

Close adherence to this methodology is especially important of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.'

And in In re Kotzab, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000), the Court said:

Mdentification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. [Dembiczak]. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. See In re Dance, 160 F.3d 1339, 1343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998), In re Gordon, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that

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> reference. See B. F. Goodrich Co. v. Aircraft Braking Sys. Corp., 72 F.3d 1577, 1582, 37 U.S.P.Q.2d 1314, 1318 (Fed. Cir. 1996).

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." In re Laskowski, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989).

As set forth above, the primary reference does not anticipate each element in claim 1. Furthermore, as noted in point one of the brief filed October 30, 2003, which the Examiner found persuasive, the secondary reference fails to disclose the at least one speaker being disposed in rearward section of the trunk occupying negligible useful volume to cause a smaller decrease in calculated trunk volume than would occur with the one speaker mounted in the rear deck. Accordingly, it is impossible to combine the primary and secondary references to meet claims 2-4. "Moreover, we observe that even if these references were combined in the manner proposed by the examiner, that which is set forth in appellant's claims . . . would not result." Ex parte Bogar, slip op. p.7 (BPA&I Appeal No. 87-2462, October 27, 1989). "Even if we were to agree with the examiner that it would have been obvious to combine the reference teachings in the manner proposed, the resulting package still would not comprise zipper closure material that terminates short of the end of the one edge of the product containing area, as now claimed." Ex parte Schwarz, slip op. p.5 (BPA&I Appeal No. 92-2629 October 28, 1992). "Although we find nothing before us indicating why it would be desired to combine the references in the manner urged by the examiner, it is clear to us that such a modification by itself would not result in that which is set forth in the claims." Ex Parte Kusko, 215 U.S.P.Q. 972, 974 (BPA&I 1981). That it is impossible to combine the primary and secondary references to meet the limitations of claims 2-4 is reason enough for withdrawing the rejection of them on this combination of references.

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If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in each reference regarded as corresponding to each limitation in each in of these rejected claims, and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

27-37. Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ziffer as a primary reference in view of Bazooka as a secondary reference. These rejections are said to rely on the embodiments depicted in the top photograph on page 48 in the primary reference said to show the bass tubes placed near the trunk front wall. The Examiner substantially repeats his contentions set forth in paragraph 18 regarding the primary reference and his contentions in paragraph 24 regarding the secondary reference.

The rejection of claim 2 in paragraph 29 patterns that in paragraph 24, and the rejections of claims 3 and 4 in paragraphs 30 and 31 pattern those in paragraphs 25 and 26. The rejection of claim 5 and 6 in paragraph 32 and 33 patterns those in paragraphs 20 and 21. The rejection of claims 7 and 8 in paragraphs 34 and 35 rely on the rejection of claim 6 in paragraph 33 and contentions in paragraph 24. The rejections of claims 8-10 pattern rejections above in connection with alleged rear corner mounted bass tube woofers mounted in enclosures and alleged inherent disclosure of structure where the front seat frequency response hole and rear seat frequency response peak are the result of using deck mounted speakers.

This ground of rejection is respectfully traversed. We have shown above that the primary reference fails to anticipate claim 1, and nothing in the secondary reference discloses limitations in claims 1-10. It is impossible to combine these references to meet the limitations of claims 1-10. Accordingly, withdrawal of the rejection of claims 1-10 as unpatentable over the primary reference in view of the secondary reference is respectfully requested. Should this ground of rejection be repeated, the Examiner is respectfully requested to quote verbatim the language in each reference regarded as corresponding to each element in these rejected claims and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

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38-43. While stating "Applicant's arguments see pages 4-17 of appeal brief filed 30 October 2003, with respect to the rejections of claims 1-10 under 35 U.S.C. §102 and 35 U.S.C. §103 have been fully considered and are persuasive, therefore the rejection has been withdrawn," the Examiner appears to repeat the withdrawn rejection of claims. The reasoning advanced in the brief filed 30 October 2003 is equally applicable to distinguishing the claimed invention from the same prior art here.

In view of the forgoing authorities, remarks, and the inability of the prior art to anticipate, suggest or make obvious the subject matter as a whole of the invention disclosed and claimed in this application, all the claims are submitted to be in a condition for allowance, and notice thereof is respectfully requested. Should the Examiner believe this application not be in a condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at 617-521-7014 to discus what additional steps the Examiner believes are necessary to place the application in a condition for allowance.

Respectfully submitted, FISH & RICHARDSON P.C.

Date: NOV 2 3 2004

Charles Hicken Reg. No. 18,411

Attorneys for Application Owner

la Hickon

Fish & Richardson P.C. 225 Franklin Street Boston, MA 02110-2804 Telephone: (617) 542-5070 Facsimile: (617) 542-8906

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